

## Functional Description

The Four Transistor, FTX-1A, module consists of four single transistors with individual base, emitter and collector leads terminated at specific pins. The individual transistors offer the circuit designer uniformity of circuit packaging as well as flexibility in application with other SLT modules. The FTX-1A has the highest collector to emitter breakdown voltage of the three medium speed transistor modules.

## Schematic



## Terminal Configuration



Mechanical  
Chamfer  
Right Side

## Maximum Ratings

$I_E = 50$  Milliamps

## FTX-1A Test Conditions

INDIVIDUAL DEVICE PARAMETER TESTS					
TESTS	TEST CONDITIONS	T <sub>a</sub> °C	LIMITS		
			MIN	MAX	UNITS
$V_{CEO}$	$I_C = 5\text{ma}, I_B = 0$	25	10		V
$V_{CBO}$	$I_C = 10\text{ }\mu\text{a}$	25	12		V
$V_{EBO}$	$I_E = 10\text{ }\mu\text{a}$	25	2.5		V
$I_{CEX}$	$V_{CE} = 10\text{V}, V_{BE} = .35\text{V}$	75		20	$\mu\text{a}$
$h_{FE}$	$I_E = 10.0\text{ma}, V_{CB} = 0\text{V}$	25	25		
$\tau_s$	See Fig 1	25		50	nsec
/GAIN/	$f = 100\text{ mhz}, I_E = 10\text{ma}, R_L = 50\Omega, V_{CB} = 3.0\text{V}$	25	1.5		
$C_{ib}$	$V_{EB} = 0, f = 1 \pm .5\text{ mhz}$	25		7.5	pf
$C_{ab}$	$V_{CB} = 0, f = 1 \pm .5\text{ mhz}$	25		6.5	pf
$V_{CE}$	$I_C = 1.0\text{ma}, I_B = .05\text{ma}$	25		.30	V
$V_{CE}$	$I_C = 10.0\text{ma}, I_B = .5\text{ma}$	25		.30	V
$V_{CE}$	$I_C = 50.0\text{ma}, I_B = 2.5\text{ma}$	25		.50	V
$V_{BE}$	$I_C = 1.0\text{ma}, I_B = .05\text{ma}$	25	.60	.75	V
$V_{BE}$	$I_C = 10.0\text{ma}, I_B = .5\text{ma}$	25	.70	.85	V
$V_{BE}$	$I_C = 50.0\text{ma}, I_B = 2.5\text{ma}$	25	.80	1.10	V
$h_{fb}$	$I_C = 1.0\text{ma}, V_{CB} = +1\text{V}, f = 10\text{mhz}$	25		.05	

## $\tau_s$ Test Circuit

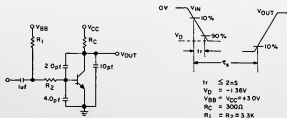


FIGURE 1